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GUIDANCE FOR DEVELOPMENT OF AN EMERGENCY FALLOUT SHELTER STOCKING PLAN

DEPARTMENT OF DEFENSE

DEFENSE CIVIL PREPAREDNESS AGENCY

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This Civil Preparedness Guide (CPG 1-19) supersedes the following Federal Civil Defense Guide (FG) publications which are obsolete:

- FG D-2 Provisioning Shelters
- FG D-2-1 Description, Storage, and Handling of Public
Fallout Shelter Supplies and Equipment
- FG D-2-1.1 Guidance on Water Containers Stored in
Public Fallout Shelters
- FG D-2-1.2 Protective Devices for Storage of Shelter
Supplies
- FG D-2-4 Fallout Shelter Water Requirements
- FG D-2-6 Fallout Shelter Food Requirements
- FG D-2-7 Fallout Shelter Sanitation Kits
- FG D-2-8 Fallout Shelter Medical Kits

Defense Civil Preparedness Agency
Department of Defense

GUIDANCE FOR DEVELOPMENT OF
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I. PURPOSE

The purpose of this Civil Preparedness Guide is to set forth guidance for use by State and local civil preparedness officials in developing effective fallout shelter stocking plans. Such planning is essential for successful operations and survival in a nuclear attack emergency and all civil preparedness officials are encouraged to ensure that fallout shelter stocking plans are developed and approved by the appropriate government executive.

II. BACKGROUND

The stocking of fallout shelters began in the early 1960's when DCPA procured 165,000 tons of shelter food. The food and other supplies were granted to the States and localities, and placed in approximately 100,000 fallout shelters around the United States during the period 1962-1970. In 1969, it was decided not to renew efforts for Federal stocking when it became obvious that Congress would no longer appropriate funds for shelter supplies. In 1976, as the result of laboratory and other tests, it was established that there was a high probability that most of the cereal-based rations stored in fallout shelters had become rancid. In view of these facts, DCPA Circular 76-2, Shelter Supplies, dated September 29, 1976, was promulgated which provided the status on the cereal-based food and medicines in shelters. It authorized these stocks to be disposed of but recommended usable supplies in the medical and sanitation kits to be retained in the shelters.

Because of the above and expressed attitudes of Congress, DCPA adopted the position that stocking or restocking of fallout shelters would have to be a local responsibility, using supplies available within each community.

III. MISSION

To ensure that an adequate supply of essential survival needs are or will be made available to all shelters to be used in the event Community Shelter Plans (CSPs) or Crisis Relocation Plans (CRPs) are implemented.

IV. ASSUMPTIONS

Basic planning assumptions for fallout shelter stocking plans are as follows:

A. The American public will have to seek shelter from radioactive fallout in time of nuclear attack.

B. There will be a period of international tension prior to the initiation of an attack.

C. Local government authorities will begin shelter stocking as soon as possible after receiving official Federal advice to stock the shelters because of an international crisis with the potential of involving the United States in a nuclear war.

D. Shelter stocking should be completed prior to receipt of an attack warning.

E. Some inventory of usable food will be available at retail and wholesale outlets during the crisis period.

F. Several different methods of obtaining water, food and other supplies will be used.

1. Inventories of stores and warehouses near the shelters will be available during the pre-attack phase.

2. Individuals may be requested to bring only non-perishable provisions to the shelters.

3. Resupply will be from the remaining local sources following the attack phase and undertaken only when it is possible to venture out of the shelter.

G. Special medicine or foods such as insulin, heart tablets, dietetic foods or baby foods will be brought to the shelter by the individual or family.

H. Cooking facilities will not be available in the shelter.

I. Shelter feeding will be austere and for survival only.

J. People using their own basements for shelter will provide their own supplies.

K. Water is the most crucial survival resource.

L. Public utilities may not be available.

M. Other assumptions may be necessary for certain local factors in preparing the stocking plan while others noted above may be eliminated during the planning process.

V. SHELTER STOCKING CONDITIONS

There are three conditions that each Shelter Stocking Plan must cover. First, during an international crisis buildup, if the local

Community Shelter Plan (CSP) or the Crisis Relocation Plan (CRP) is activated, Increased Readiness Stocking would be started. The second condition would be a surprise or sudden emergency when Expedient Stocking would be required. The third condition would be Peacetime Stocking.

A. Increased Readiness Stocking - This is the most likely situation for which plans should be developed, since economic considerations often preclude peacetime stocking. During a period of international tension or increased readiness, or in the beginning of a crisis relocation as directed by the President, local plans should provide for crisis stocking of fallout shelters from commercial or other sources. Part II of this guide provides for detailed guidance on planning for increased readiness stocking.

B. Expedient Stocking - This is the type of situation caused by an attack with little or no warning. Community Shelter Plans (CSP), in-place plans, would be implemented but there would not be time to execute Crisis Relocation Plans (CRP). Movement to fallout shelter would have to be ordered before the local government could begin or complete its increased readiness stocking. In such a case, local plans should provide for news media notices to advise the public to bring available supplies from their homes to the shelters. Such stocking would be at the individual's expense, unless his excess supplies were taken over by the shelter manager for use by other persons. In that case, a receipt should be given. Persons going to shelters should be advised to bring foods for any special dietary needs, and to avoid bringing prohibited substances, such as alcoholic beverages.

C. Peacetime Stocking - If it is decided to do some peacetime stocking, careful consideration should be made of the types of food available for long term storage. Food supplies which require rotation and replacement become a costly method. Facilities such as government emergency operating centers (EOCs), industrial EOCs, and similar essential activities should consider peacetime stocking or at least have a plan for rapid stocking when an emergency becomes imminent.

VI. REQUIREMENTS FOR SHELTER HABITATION

A. Special Planning - During the crisis build-up period, the local civil defense director and staff must obtain and stock many special items needed for shelter habitation such as the following:

1. Radiological instruments.
2. Durable plastic bags and containers (buckets, 5-10 gallon cans, barrels, etc.) to store water and to ensure sanitary storage and disposal of human waste, garbage and trash.
3. Flashlights and batteries.

4. Fire extinguishers.
5. Transistor radios and replacement batteries.
6. Decontamination equipment and clothing.
7. Entertainment games.
8. Other miscellaneous items to make the shelter more comfortable and livable.

B. Local Government Agencies - The local civil defense director, in developing shelter requirements, should involve all elements of local government. Local government agencies should be briefed on the shelter system and assigned activities requiring their competence. Such involvement enhances the civil defense program competence during peacetime, and assures a more effective system during emergency shelter stocking operations. For example, the Public Works agency or department has functions quite similar to shelter requirements, as shown below:

<u>Local Government Organization</u>	<u>Related Shelter Activities</u>
Public Works	--
Sanitation	Sanitation Requirements
Refuse Collection	Waste Disposal
Water Pollution Control Plant	Water & Purification
Street Light Maintenance	Shelter Lighting
Transportation	Trucking Firms
Housing Services	Fallout Shelters
Health Department	Medical Services
Central Stores	Food Stocking

C. Life Support Planning - Stocking of shelters should include vital life support needs as follows:

- Water
- Food
- Sanitation Equipment and Supplies
- Medical Supplies
- Sleeping and Entertainment Supplies

1. Water - The provision for water is the most important ingredient in stocking for shelter survival. Long term storage is a problem due to lack of storage space; unless it is carefully stored, water may leak from containers and damage other supplies. Therefore, (without special planning) providing water when it is needed may be one of the most difficult requirements to satisfy. Again, durable plastic storage bags and containers (buckets, 5-10 gallon cans, barrels, etc.) should be pre-positioned, if not during peacetime, at least during an emergency build-up.

Survival for a two-week period is possible without food if sufficient water is available. The minimum per person is 3-1/2 gallons for each identified shelter space. If there is no shortage of water, drinking on demand should be permitted to prevent dehydration. Each shelter must be surveyed and evaluated as to availability of water trapped in the building which can be removed from the lowest gravity point, hot water heaters, or possibly from the community supply if it is a gravity flow type system (Attachment A). If sufficient water cannot be obtained in this manner, other sources must be considered. For instance, a local dairy could package water in their regular milk containers at the time shelter stocking takes place. Other sources may be beverage bottlers (soft drinks and breweries) which could package water in their normal container and deliver in case lots. Purified water should be protected against contamination by proper storage in a covered tank or container. Storage container for purified water should be cleaned and disinfected before initial use. This can be done by washing inside walls and bottom with detergent, rinsing with clear water and then rinsing with disinfectant solution (1-1/2 teaspoonfuls of regular household bleach to 1 gallon of water).

A necessary health safeguard is disinfection of all water before use for drinking or cooking. To prepare turbid or colored water for disinfection, filter the water through a clean cloth or allow the sediment to settle and then draw off the clear water. In emergencies, the following disinfection methods may be used for small quantities of water. Most water can be made safe for drinking purposes by boiling for 1 to 5 minutes. Allow to cool. Add pinch of salt to remove flat taste. If boiled water is to be stored, it should be chlorinated. Another method is to add 3 drops tincture of iodine to one quart of clear water; double if the water is cloudy. Mix and allow to stand for about one-half hour.

Chlorination is recommended for disinfection of either a small or large volume of water. Chlorine in the form of sodium hypochlorite works very well and ordinary household bleaches contain this compound. Five and a quarter percent liquid strength is best. Strengths are given on jug labels.

TABLE OF CHLORINE SOLUTION FOR DISINFECTING WATER

<u>Quantity of Water</u>	<u>Dosage of 5.25% Solution*</u>	
	<u>Clear Water</u>	<u>Cloudy Water</u>
1 quart	2-3 drops	5 drops
1 gallon	10 drops	20 drops
5 gallons	1/2 teaspoon	1 teaspoon
1,500 gallons	1 quart	2 quarts

*Dosages will have to be adjusted for other chlorine strengths and other volumes of water.

After the disinfectant has been added, the water should be thoroughly shaken or stirred. Wait about 1/2 hour before using the water. Treated water should have a distinct smell of chlorine. The taste may not be pleasant, but the chlorine will not be harmful. If treated water does not have the smell and taste of chlorine, add more bleach, mix further and let stand for another 15 minutes.

Water purification tablets also may be used and are sold commercially under various trade names. They are generally available at drug and sporting goods stores. Follow the directions on the bottle label, but double the dosage if the water is cloudy. Purification tablets release chlorine or iodine when dissolved in water. Before using the water, let it stand for about 1/2 hour after the tablet has dissolved.

Other methods of disinfection may be recommended by the proper authorities if conditions arise. In such cases, follow the instructions of your local government health officials. Unless approved by health officials, do not use any chemical except iodine, chlorine, or water purification tablets to disinfect water.

If possible, seal all containers in which disinfected water is stored. If not possible, cover container securely to protect against contamination. Store off ground. Locate away from garbage and toilet areas. Provide single-use disposal drinking cups. Drinking cups shall be marked and retained for re-use by individual shelterees. If necessary, clean garbage cans with plastic liners (trash bags) can be filled with water.

Each shelter will have to be considered individually and a schedule developed for supplying its water requirements.

2. Food - The unlikelihood of pre-positioned supplies necessitates the procurement of food from local supplies. This is complicated by the types of foods that must be utilized since cooking facilities, electricity, and natural gas likely will not be available. Foods will have to be "ready-to-eat" or those that can be mixed with water or juices in order to provide the required nourishment. Fortunately, the amount of physical activity on the part of shelter occupants will be lessened, resulting in a greatly reduced requirement for food intake.

Determination of the types of food to stock in the shelters will be dependent on locally available suppliers, the manner in which food can be prepared and the requirements for preparation in each shelter. Increased readiness food stocking planning should take into account certain important factors.

Foods high in protein and fat should not be the mainstay of the diet unless large amounts of drinking water are available, as without about eight glasses of water per person per day, such foods can result in kidney irritation and constipation. Foods requiring cooking are to be avoided because this requires an assured source of heat. Perishables are

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not recommended. However, some perishables may be brought to shelters, particularly when shelterees are requested to bring food in an unexpected crisis. In such cases the perishables should be consumed first.

The most desirable way to stock is with crackers and canned goods which are easy to transport, store and prepare. If adequate canned food supplies cannot be provided, consideration should be given to simple foods such as whole grain cereals. Shelter occupants should be encouraged to bring additional food supplies from home to supplement stocked supplies.

3. Sanitation Requirements - The health and well-being of shelter occupants will depend on extreme care being given to the cleanliness of the shelter facility. One of the major problems will be maintaining adequate sanitation standards, especially if normal water supplies are not available. Ideally the regular restroom facilities could be used, but if water is not available, consideration must be given to alternative facilities and disposal of waste. This can be accomplished with drums or garbage cans fitted with plastic liners which can then be sealed and stored for disposal after the shelter stay. A disinfectant will assist in maintaining adequate sanitation, and also freshen the air. Likewise, procedures and programs must be established for regular cleaning of the shelter, food handling, storage of food scraps, and for individual personal cleanliness. With a limited amount of water, substitutes (rubbing alcohol, packaged cleaning towels or non-potable water) should be used if available.

Many shelters may still have the old pre-positioned sanitation kits consisting of a fiber drum, the drum to be used as the initial chemical toilet for up to 50 people. The kit also contains a plastic commode seat, toilet paper, commode chemical and other essentials. Unless the shelter is so stocked, equivalent facilities must be provided. Commercial disinfectants are available and should be surveyed for possible use. Again, buckets or drums lined with plastic bags provide for easy storage and the eventual disposal of waste. Packaged cleaning towels are available and can be useful. Non-drinkable water supplies should be used for washing and cleaning, if available.

4. Medical Supplies - The requirement for medical support will be uncertain; however, based on normal requirements and the added stress of a confined stay in shelter, additional medical problems should be expected. Availability of usual household medicines will eliminate many of the problems and will make the shelter stay more comfortable and agreeable to the occupants. Most sickness will probably be minor in nature and can be cured with basic medications. First aid kits and an additional supply of bandages and antiseptics is recommended. Medical supplies should be available to treat headaches, waste elimination problems, and respiratory symptoms. Shelterees should be encouraged to bring basic medical items with them and if present in the shelter, a trained medical person should be put in charge of the supplies. The chronically ill should be advised to bring their own medicines.

The maintenance of health and the requirement for medicines will depend upon the attention given to sanitation measures, careful handling of water and food, and the isolation of persons who are ill.

The ability to provide medical care may depend on the training provided to the general public prior to going to shelter. An on-going first aid training program in the community can provide greater assurance that first aid care will be available.

The Operations Plan should provide for a doctor at each shelter, if possible. If not possible, a doctor should be assigned to a group of shelters.

Some shelters may contain the medical kits distributed during the 1960's. The medicines have exceeded their shelf life and should not be used.

5. Sleeping and Entertainment Supplies - Shelter occupants should be encouraged to bring with them, in addition to the essential water, food and medical supplies, the following:

- Bedding or sleeping bags, cots
- Eating utensils
- Change of clothing
- Children's games
- Adult games

These requirements should be planned for in advance, primarily by education programs in the community and by the development of emergency public information materials to be used during a crisis period.

6. Stocking Special Facilities - The local plan should include sheltering people living in special facilities such as nursing homes, hospitals, jails, schools, etc. Whether the fallout shelter is within the facility or at a distance, plans should be made to stock shelters with the specialized equipment, food, and medicines normally required, to assure continued care.

7. Foraging for Shelter Supplies - After completion of the movement to shelter, it may be found that supplies are still critically short. In such case, quick expeditions from the fallout shelter to nearby stores might be possible if fallout has not yet arrived. These actions should be taken under local government direction, with funds provided or receipts prepared for supplies taken, to avoid any confusion with looting. A decision to forage for food, water or equipment may have to be made near the end of the shelter stay when fallout levels may still be high. Before opting to forage, the water or food supply should be critically low or non-existent and the shelter stay expected to exceed an acceptable

period of survival without water and food. The shelterees should assure themselves that no help from the local government will be forthcoming. They should also ascertain the radiological fallout level and weigh the risk very carefully before making the decision to leave the protection of the shelter.

VII. SHELTER OFFICER TASKS (OR LOCAL CIVIL DEFENSE DIRECTOR)

A. Pre-emergency Planning

One person must be in charge of all shelter operations and may be a full time Shelter Officer, the local CD Director, or the RADEF Officer, depending on the size or requirements of the community.

The Shelter Officer should:

1. Prepare a list of shelter managers for assignment to each shelter and enter on Attachment C.
2. Consider the type of feeding arrangements prescribed in the shelter management plan. Normally feeding will be accomplished by distributing supplies from a central point to shelterees organized in small groups (8 or 10 shelterees to a group).
3. Calculate community food requirements, using data from the Food Purchase Guide and Checklist (Attachment B), the listing of shelters and spaces and spaces on the Shelter Locations and Status report (Attachment C), and the procedure established in Menu Development (Attachment D). Prepare a menu for a 14-day shelter stay. The menu should be the same for all shelters. It is suggested that each menu be served several times. When the total menus developed reaches 28, (2 meals a day for 14 days) the overall community food requirements can be determined. The same procedure can be used to determine water requirements. Enter the requirements on the Supplier Listing and Requirements form (Attachment E).
4. Request each shelter manager to prepare food requirements based on the shelter spaces in his shelter and to prepare an Emergency Supply Order (Attachment F), in advance, for submission to a supplier when needed.
5. Evaluate each shelter for availability of trapped water. If sufficient water is not available, secure agreements from Water Suppliers to supply water in cartons, etc. Enter these firms and requirements on Attachment E.
6. Prepare a plan for food, water, and any other items for transportation to the shelters keeping in mind that most retail outlets, particularly food, do not have transportation available for this work. Reliance for transportation should be placed wherever possible

on local government agencies, local trucking firms or other local sources, and a list of cooperating firms should be prepared. Trucking firms and suppliers should be assigned specific nearby shelters for stocking upon receipt of an Emergency Supply Order from the shelter. When all requirements have been recorded on Attachment E, it should be duplicated and distributed to the suppliers for their emergency use.

VIII. ACTIVATION OF THE PLAN

To accomplish activation, the Shelter Officer should:

A. Advise Shelter Managers that their shelters are to be activated and to initiate shelter use and operations activities.

B. Request Shelter Managers to forward the prepared Emergency Supply Orders to the assigned supplier.

C. Advise all suppliers to prepare to pack supplies and food for shipment based on the requirements listed on the Supplier Listing and Requirements form and the Emergency Supply Orders form for individual shelters.

D. Advise trucking firms transporting water, food, sanitation, medical and other supplies to report to their assigned suppliers for loading shelter supplies. The trucker should return the authorizing Emergency Supply Order to the Shelter Manager upon delivery of the supplies.

E. Request the Radiological Defense Officer to have stockpiled radiological kits moved to shelters and checked out for operability.

F. Release through the Public Information Officer advisories to the public via TV, radio, and the press. See sample releases at Attachments G and H.

G. Advise city, county and State civil defense officers of stocking progress.

AVAILABILITY OF WATER IN EXISTING STRUCTURES

Most buildings have a sizable quantity of potable water trapped within the plumbing system. This includes water in water heaters, boilers, fire standpipes, distribution pipes, etc. To use this water, it is only necessary to follow a few simple steps. First, if water service to the building is no longer functioning, the main valve should be located and turned off to prevent water already in the building from being drained away by a possible outside break in the line. Next, in order to relieve any vacuum created within the lines, open one or more faucets on the top floor of the building. Water can then be drawn off the system at any of the lower floors with the last bit in the system being available at the lowest floor. Storage tanks such as water heaters will usually have a drain valve near the bottom. Although water from such tanks may initially be muddy, the water is still drinkable after allowing the particles to settle.

The following are typical examples of the inherent capabilities of different types of buildings listed for storage of potable water. Storage tank quantities vary from building to building, however, the estimated quantities of water trapped in the water piping, sprinkling systems and Fire Department Risers, listed below, will be sufficiently accurate for survey studies, unless an accurate quantity can be obtained from the building owner's files.

SINGLE UNIT DWELLING

Hot water storage tank - 30 to 40 gallons
 Water closet flush tank - 4 gallons each
 Water piping - 1.5 to 2 gallons

MULTI-UNIT DWELLING (Apartment Building)

Hot water storage tank - 20 to 30 gallons per apartment
 Water closet flush tank - 4 gallons each
 Water piping - 1 gallon per apartment

HOSPITALS

Hot water storage tank - 10 to 20 gallons per bed
 Water piping - 1 to 2.5 gallons per bed
 Wet pipe sprinkler system - approximately 5 gallons per 1,000 square feet
 of area sprinkled if water treatment is non-toxic
 Fire Department Riser - 0 to 1 gallon per 1,000 square feet

INDUSTRIAL PLANTS

Hot water storage tank - average 2 gallons per person
 Water piping - 0 to 0.1 gallon per person
 Wet Pipe sprinkler system - approximately 5 gallons per 1,000 square feet
 of area sprinkled if water treatment is non-toxic
 Miscellaneous - 0 to 10 gallons per person

HIGH RISE APARTMENTS

Hot water storage tank - 20 gallons per apartment
Water piping - 0.5 gallons per apartment
Indoor swimming pools - average 35,000 gallons
Fire Department Riser - 0 to 1 gallon per 1000 square feet

OFFICE BUILDING

Hot water storage tank - 0.4 gallons per person
Water piping - 0.05 gallons per person
Fire Department Riser - 0 to 1 gallon per 1,000 square feet

DEPARTMENT STORE

Hot water storage tank - 4 gallons per 1,000 square feet of floor space
Wet pipe sprinkler system - approximately 5 gallons per 1,000 square feet of area sprinkled if water treatment is non-toxic
Water piping - 0.01 gallons per person
Fire Department Riser - 0 to 1 gallon per 1,000 square feet

THEATERS OR PLACES OF AMUSEMENT

Hot water storage tank - 4 gallons
Wet pipe sprinkler system - approximately 3 gallons per 1,000 square feet of area sprinkled if water treatment is non-toxic
Fire Department Riser - 0 to 1 gallon per 1,000 square feet

PUBLIC SCHOOLS

Hot water storage tank - 3 to 4 gallons per person
Water piping - 0.01 to 0.05 gallons per person
Fire Department Riser - 0 to 1 gallon per 1,000 square feet

HOTELS

Hot water storage tank - 15 gallons per bath
Dining room facilities - 20% of above
Water piping - 0.5 gallons per bath
Indoor swimming pool - 40,000 gallons
Fire Department Riser - 0 to 1 gallon per 1,000 square feet

INSIDE COLD WATER TANK

Some older multi-story buildings have a pneumatic cold water storage tank of 1,000 to 2,000 gallons capacity. Such tanks may be used for storage purposes if their condition permits.

INSIDE ELEVATED OR COVERED TANK

Older buildings will have a tank which contains large quantities of water for fire fighting purposes. This water can be used by draining it from the sprinkler or stand-pipe systems.

OUTSIDE STORAGE TANK

There are places, particularly in outlying areas, where communities, schools, hospitals, industrial plants, etc., have outside water tanks. If these tanks are covered and in good condition, they can be used for the storage of potable water. Capacities vary up to 50,000 gallons or more.

WATER IN HEATING AND AIR CONDITIONING SYSTEMS

Normally water used in cooling towers, evaporative condensers or in circulating heating and chilling equipment is treated to prevent scale, rust, algae, etc. These treatments are usually too toxic for the water to be considered potable. These systems could contain as much as 2 gallons per 1,000 square feet of floor space. Heating radiators, if used, will contain 2 to 4 gallons each. Water will vary considerably in its toxic content in different buildings. The use of this water will be considered in surveys as non-potable unless it can be readily determined safe for human consumption. If not, it can be used for disposal of sewage and waste.

OPEN STORAGE FACILITIES

Because it would contain radioactive particles, water in outdoor swimming pools, reservoirs, etc., should not be considered for potable water supply. Special filters that will remove enough of the particles to make the water safe would be required; however, determinations should be made whether or not this water could be made available for other uses.

FOOD PURCHASE GUIDE AND CHECKLIST
FOR STOCKING FOOD IN SHELTERS

<u>Item</u>	<u>Unit Serving</u>	<u>Amount to Purchase for 100 Servings</u>
BEVERAGES, Instant		
Coffee	1 cup	4 4-oz. jars
Tea	1 cup	1/3 lb.
Cocoa	1 cup	1-1/2 lbs.
BREAD		
1 lb. loaves	2 slices	13 loaves
CEREALS, Boxed		
Puffed Cereals	cup	13 4-oz. packages
Shredded Wheat	cup	8 or 9 12-oz. packages
CRACKERS, Boxed		
Soda or Saltine		1-1/3 16 oz. box
Rye Crisp		1-1/3 16 oz. box
FISH, Canned		
Salmon	1/2 cup	25 1-lb. tall cans
Tuna	1/2 cup	25 #1 cans
FRUIT, Canned		
Applesauce	1/2 cup	4 #10 cans
Grapefruit	1/2 cup	4 #10 cans
Peaches	2 halves	4 #10 cans
Pears	2 halves	5 #10 cans
Pineapple	1-2 slices	4 #10 cans
Plums	3 whole	4 #10 cans
FRUIT, Dried		
Apricots	1/2 cup	12 pounds
Figs	3	7 pounds
Prunes	4-5	12 pounds
Raisins	1/2 cup	12 pounds
JUICES, Canned		
Grapefruit	4 oz.	4 #10 cans + 1 #2 can
Orange	4 oz.	4 #10 cans + 1 #2 can
Pineapple	4 oz.	4 #10 cans + 1 #2 can
Tomato	4 oz.	4 #10 cans + 1 #2 can
MEAT, Canned		
Luncheon	2 slices	3 6-lb. tins
Spread, deviled or potted	1-1/2 Tbs.	13 #1/2 cans

Attachment B

<u>Item</u>	<u>Unit Serving</u>	<u>Amount to Purchase for 100 Servings</u>
MEAT, Smoked Hard Salami	2 slices	2 12-inch rolls
MILK, Canned Whole	1 cup	25 quarts
SOUP, Canned Ready-to-eat	1 cup	8 #10 cans
SOFT DRINKS, Canned	1 can	100 cans
STEW, Beef	1/2 - 2/3 cup	5 #10 cans
SUGAR, Syrup	2 Tsp.	2 pounds
VEGETABLES, Canned		
Beans, baked	1/2 cup	4 #10 cans
Beans, string	1/2 cup	4 #10 cans
Beets	1/2 cup	4 #10 cans
Carrots	1/2 cup	4 #10 cans
Corn	1/2 cup	4 #10 cans
Peas	1/2 cup	4 #10 cans
Tomatoes	1/2 cup	4 #10 cans
Turnip Greens	1/2 cup	4 #10 cans
MISCELLANEOUS		
Butter, margarine	1 large sq.	2 2-1/2 pounds
Canned Chili Con Carne	1/2-2/3 cup	5 #10 cans
Canned Spaghetti in sauce	1/2-2/3 cup	5 #10 cans
Gum	sticks	100 pieces
Hard Candy	pieces/bars	100 pieces
Jam or jelly	1 Tbs.	6 1-lb. jars or 1/2 #10 can
Non-perishable Condiments	N/A	
Peanut Butter	1 rounded Tbs.	7 pounds

MENU DEVELOPMENT

A menu for community and individual shelter requirements may be developed for a shelter stay using data from Attachments B and C.

For this example a shelter is selected that will have 300 occupants. The 300 occupants are expected to be in the shelter for 14 days. The local shelter plan calls for two meals per person, per day.

Using the Food Purchase Guide and Checklist (Attachment B), select approved goods and develop a menu for one meal. Scan the 100 servings column for the quantity required for each item selected, and multiply by 3 to establish requirements for 300 servings.

Proceed to develop a menu for 14 days (28 meals) applicable to all shelters. Items such as salt, pepper, sugar, etc., should be included, although not listed. However, each shelter manager should determine his requirements for these items and list them on his Emergency Supply Order.

EXAMPLE - First Day.

First Meal: Canned fruit or fruit juices
Cereals, ready-to-serve
Bread
Butter or Margarine
Jams or jellies
Milk

Order list based on the above:

1. Plums, 4 #10 Cans per 100 servings times 3 equals 12 #10 Cans for 300 servings.
2. Pineapple juice, 4 #10 Cans plus 1 #2 Can per 100 servings times 3 equals 12 #10 Cans plus 3 #2 Cans for 300 servings.
3. Bread, 1 lb. loaves, 13 loaves per 100 servings times 3 equals 39 loaves for 300 servings.
4. Butter or margarine, 2 2-1/2 lbs. per 100 servings times 3 equals 15 lbs. for 300 servings.
5. Jams and jellies, 6-1 lb. jars per 100 servings times 3 equals 18-1 lb. jars for 300 servings.

Second Meal: Thick soups or chowders, or
Canned stews
Canned meals, cheeses
Bread
Jams or jellies
Canned Fruits
Instant coffee or tea or cocoa
Milk

Attachment D

Order list based on the above:

1. Soups, ready to serve, 8 #10 cans per 100 servings times 3 equals 24 #10 cans for 300 servings.
2. Tomatoes, canned, 4 #10 cans per 100 servings times 3 equals 12 #10 cans for 300 servings.
3. Beef stew canned, 5 #10 cans per 100 servings times 3 equals 15 #10 cans for 300 servings.
4. Apricots, dried, 12-1/2 lbs. per 100 servings times 3 equals 37-1/2 lbs. for 300 servings.
5. Coffee, instant, 4 oz. jar per 100 servings times 3 equals 12-4 oz. jars for 300 servings.
6. Cocoa, 1-1/2 lbs. per 100 servings times 3 equals 4-1/2 lbs. per 300 servings.

The menu for meals for any shelter may be varied within the shelter allocation based on local eating habits, and shelteree wishes. Substitute items for a meal may be necessary, based on the supply of food received.

EMERGENCY SUPPLY ORDER

FROM: _____ City/County Civil Defense

TO : _____
Name of Merchant

Address _____

DATE: _____

ITEMS ORDERED	QUANTITY	DOLLAR VALUE	REMARKS
			Trucked by _____

			Deliver to _____

ORDER AUTHORIZED BY:

RECEIVED BY:

Name and Signature _____

Name _____

Title _____

Date _____

Title _____

Date _____

Sample release (Food, Special Diets, Medications, Baby Food)

WHAT TO BRING TO PUBLIC FALLOUT SHELTERS

Residents of _____ going to designated public fallout shelters should bring their own food, water, special medications, and first aid supplies.

Civil defense authorities advise that at least a _____ days supply of food be brought for each family member. This food should be non-perishable and ready-to-eat. Neither cooking facilities nor refrigeration will be available in shelters.

Shelterees should bring their own water, preferably in plastic containers (such as those for milk) so they can be refilled or used for other storage. Bring at least one quart a person per day. If enough water is available, foods needing mixing with water are acceptable. Any non-perishable foods are usable, including canned meats and vegetable, dried fruits, and dry cereals.

Persons with special medical conditions, such as heart disease and diabetes, should bring enough special diet foods and medicines for the duration of the shelter stay. Parents of infant children should bring an adequate supply of baby foods and sanitary supplies.

Sample release (Home Shelters)

GUIDANCE FOR PERSONS IN HOME FALLOUT SHELTERS

Residents of _____ who do not go to designated public fallout shelters during the current crisis will need to seek what fallout protection they can from personal fallout shelters, usually in home basements.

Civil defense authorities stress that persons in home fallout shelters must be totally self-sufficient for at least _____ days.

The most important guidance to people in home shelters is to insure enough water, based on a minimum of one quart per day per occupant. More water should be stored in containers if time allows. In addition, by closing water taps at lower levels of the house and opening one tap at the highest level, water in the pipes and water heater can be drawn as needed.

Since electricity may not be available during the crisis, any foods stored in refrigerators and freezers should be used first, leaving non-perishable foods for later. Foods in freezers will last for several days without electricity.

Persons with special medical problems such as heart disease or diabetes who elect to stay in home shelters should make sure they have enough diet foods and medications for at least the duration of their shelter stay. Parents of infants should also stock the special foods and supplies needed.